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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. |
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| 09/529,734 | 06/19/00 | HINZE | 13 23737 |

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HM12/1015

EXAMINER

PAK, J

| ART UNIT | PAPER NUMBER |
|----------|--------------|
| 1616 | 6 |

DATE MAILED:

10/15/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

| | | |
|------------------------------|--------------------------------------|------------------------------|
| Office Action Summary | Application No. 09/529,734 | Applicant(s) HINZE |
| | Examiner John Pak | Art Unit 1616 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on _____.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-8 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) The proposed drawing correction filed on _____ is: a) approved b) disapproved.
- 12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

a) All b) Some* c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

- 14) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) Notice of References Cited (PTO-892) 18) Interview Summary (PTO-413) Paper No(s). _____
- 16) Notice of Draftsperson's Patent Drawing Review (PTO-948) 19) Notice of Informal Patent Application (PTO-152)
- 17) Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____ 20) Other: _____

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Claims 1-8 are pending in this application.

The specification is objected to as for being informal (poor copy, illegible writings/marks) in pages 9-10 (Tables 1 and 2). The specification must be clearly legible. Correction is required.

Claim 1 provides for the use of a composition, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claim 1 is rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

Because claim 1 is not directed to a statutorily recognized category of invention, claim 1 cannot be further examined on the merit.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combined teachings of Morrow and Themey in view of Imai (BR 9201704), Fraser et al. (The Merck

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Veterinary Manual), VETU Abstracts 1985-63045, 1988-60359 and 1994-62049 and Kroschwitz et al. (Kirk-Othmer Encyclopedia of Chemical Technology).

Morrow explicitly discloses the use of electrolyzed sodium chloride to treat the host animal for variety of pathogenic diseases (see from column 3, line 28 to column 5, line 19; Examples I, IV, X-XII, XVI, XVII; claims 1-6). Electrolysis reaction produces ozone and various oxychlorine species such as hypochlorous acid and hypochlorite (see from column 4, line 46 to column 5, line 19). Morrow also discloses the well-known fact that products resulting from electrolysis of saline solutions have long been known as in vitro microbicides, and have been used to keep water free of pathogenic organisms such as E. Coli (see from column 5, line 56 to column 6, line 9).

Themy explicitly discloses electrolyzed sodium chloride solutions (column 2, lines 9-47; Examples I, II, IX; claims 1-13). Electrolysis reaction produces ozone and various oxychlorine species such as hypochlorite (column 2, lines 24-40).

Imai (BR 9201704) discloses 10-100 ppm solutions of hypochlorite that have particle size range of 70-150 microns, which are sprayed to open areas, foodstuffs, as well as to people without damage to materials or eyes, for the control of cholera epidemics.

Fraser et al. (The Merck Veterinary Manual) discloses that intestinal diseases in pigs can be caused by variety of microorganisms (page 190). Chlorine compounds such as hypochlorite are known to be used as disinfectants, particularly for disinfecting water supplies (page 1530).

VETU Abstracts 1985-63045 discloses the use of sodium hypochlorite to disinfect swine pens to pens prevent diseases. VETU Abstract 1988-60359 teaches the importance of

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disinfectants in preventing coccidiosis in neonatal pigs. VETU Abstract 1994-62049 discloses the benefit of water disinfection as part of a therapy regimen to control infections of E. coli, Newcastle disease and infectious bursal disease in broiler flocks.

Kroschwitz et al. (Kirk-Othmer~~4~~ Encyclopedia of Chemical Technology) are cited to establish that the electrochemical reactor features of the instant invention is conventional electrolysis technology that would have been within the skill of the ^{ordinary skilled artisan} ~~routine in the art~~ (see pages 124-133, 135-140). Various oxychlorine species are disclosed upon electrolysis of a chloride solution (pages 133-135).

The cited references establish that electrolyzed aqueous solutions of sodium chloride is an old and known substance that has microbicidal activity for in vitro or in vivo uses. The references also establish that pathogenic microorganisms infect live animals and that use of disinfectants to disinfect and/or treat water supplies is a beneficial to controlling infections. Therefore, the ordinary skilled artisan would have been motivated to administer electrochemically "activated" solution of anion containing solutions such as aqueous sodium chloride solutions to live animals to control pathogenic infections. Motivation to atomize the electrolyzed solution arises from the known benefits of spraying atomized solutions of hypochlorite (a major component of electrolyzed solution) on human beings and various substrates, the ease of rapid administration to large number of live animals while also achieving disinfection of the treated area.

For these reasons, the claimed invention, as whole, would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made, because every element of the invention has been fairly suggested by the teachings of the cited references.

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The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:

While the declaration states or indicates that the specification may have been amended, it is unclear when that amendment was made. "19" is unclear. Therefore, applicant's declaration fails to properly identify the specification for ^{which} ~~which~~ applicant is making the declaration.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner J. Pak whose telephone number is (703) -308-4538. The examiner can normally be reached on Monday through Thursday from 8 AM to 5 :30 PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jose Dees, can be reached on (703) -308-4628. The fax phone number for the organization where this application or proceeding is assigned is (703) -308-4556.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) -308-1235.

Pak/LR

September 27, 2001


JOHN PAK
PRIMARY EXAMINER
GROUP 1200